

Remarks

I. Status of claims

Claims 1-27 and 52-59, which have been withdrawn from consideration as being directed to a non-elected species, have been canceled without prejudice.

The Examiner has indicated that claims 32-39 and 41-45 would be allowable if rewritten in independent form. Claims 32, 35, 38, and 44 have been rewritten in independent form; therefore, these claims and the claims that depend therefrom now should be in condition for allowance.

Claim 40 has been rewritten in independent form and has been amended to incorporate the elements of allowed claims 41-43. Therefore, claim 40 now should be in condition for allowance for at least the same reasons as claims 41-43.

Claims 60-64 have been added.

II. Claim rejections under 35 U.S.C. § 102

The Examiner has rejected claims 28, 46-48, and 51 under 35 U.S.C. § 102(e) over Chen (U.S. 6,895,112).

Independent claim 28 has been amended and now recites:

28. A method of processing an input image, comprising:
- identifying a set of candidate redeye pixel areas in the input image;
 - projecting input image data into a feature space spanned by multiple features to generate feature vectors respectively representing the candidate redeye pixel areas in the feature space, wherein each of the feature vectors comprises a respective set of weights corresponding to respective ones of the features, and the projecting comprises for each of the feature vectors determining a respective one of the weights from multiple values of a statistical measure that are derived from respective sets of image values corresponding to different respective regions of the input image; and
 - filtering from the set ones of the candidate redeye pixel areas classified as non-redeye pixel areas based on the generated feature vectors.

Chen does not disclose that “the projecting comprises for each of the feature vectors determining a respective one of the weights from multiple values of a statistical measure that are derived from respective sets of image values corresponding to different respective regions of the input image,” as now recited in claim 28.

Chen discloses that “In another implementation, the pixels in the window are normalized to account for variations in lighting conditions and then projected onto an eigenspace representation which returns a feature vector for the candidate eye region” (col. 6, lines 2-6). Chen, however, does not provide any details regarding the eigenspace representation.

For at least this reason, the rejection of claim 28 under 35 U.S.C. § 102(e) over Chen now should be withdrawn.

Each of claims 46-48 incorporates the elements of independent claim 28 and therefore is patentable over Chen for at least the same reasons explained above.

Independent claim 51 has been amended and now recites elements that essentially track the pertinent elements of claim 28 discussed above. Therefore, claim 51 is patentable over Chen for at least the same reasons explained above in connection with claim 28.

III. Claim rejections under 35 U.S.C. § 103

A. Claim rejections over Schildkraut in view of Chen

The Examiner has rejected claims 28-29 under 35 U.S.C. § 103(a) over Schildkraut (U.S. 6,292,574) in view of Chen (U.S. 6,895,112).

As explained above, Chen does not disclose that “the projecting comprises for each of the feature vectors determining a respective one of the weights from multiple values of a statistical measure that are derived from respective sets of image values corresponding to different respective regions of the input image,” as now recited in claim 28.

Schildkraut does not make-up for the failure of Chen to teach or suggest this feature of independent claim 28. Indeed, Schildkraut does not disclose anything about determining weights of feature vectors that represent candidate redeye pixel areas in a feature space and based on which ones of the candidate redeye pixel areas are classified as non-redeye pixel areas. Instead, Schildkraut discloses a template matching approach that involves performing

a correlation between a region around a candidate redeye pixel and an eye template that consists of "any image of an eye" (see col. 6, lines 37-39, and col. 7, line 35 et seq).

For at least these reasons, the rejection of claim 28 under 35 U.S.C. § 103(a) over Schildkraut in view of Chen now should be withdrawn.

Claim 29 incorporates the elements of independent claim 28 and therefore is patentable over Schildkraut in view of Chen for at least the same reasons explained above.

B. Claim rejections over Steinberg in view of Chen

The Examiner has rejected claims 28-31, 40, and 46-51 under 35 U.S.C. § 103(a) over Steinberg (U.S. 6,873,743) in view of Chen (U.S. 6,895,112).

As explained above, Chen does not disclose that "the projecting comprises for each of the feature vectors determining a respective one of the weights from multiple values of a statistical measure that are derived from respective sets of image values corresponding to different respective regions of the input image," as now recited in claim 28.

Steinberg does not make-up for the failure of Chen to teach or suggest this feature of independent claim 28. Indeed, Steinberg does not disclose anything about determining weights of feature vectors that represent candidate redeye pixel areas in a feature space and based on which ones of the candidate redeye pixel areas are classified as non-redeye pixel areas. Instead, Steinberg discloses that segments that do not satisfy a range of characteristics and criteria normally associated with a valid redeye segment are eliminated from an initial set of potential redeye segment (see col. 9, lines 46-65, and col. 6, lines 47-63). These characteristics and criteria include the size of a segment (see col. 9, line 66), the non-compactness of a segment (see col. 11, lines 40-45), whether a segment is located in the neighborhood of skin patches (see col. 12, lines 8-10), and whether a segment has low internal contrast (see col. 12, lines 27-52). None of these characteristics and criteria involves "determining a respective one of the weights from multiple values of a statistical measure that are derived from respective sets of image values corresponding to different respective regions of the input image," as now recited in claim 28.

For at least these reasons, the rejection of claim 28 under 35 U.S.C. § 103(a) over Schildkraut in view of Chen now should be withdrawn.

Each of claims 29-31 and 46-50 incorporates the elements of independent claim 28 and therefore is patentable over Steinberg in view of Chen for at least the same reasons explained above.

Independent claim 51 has been amended and now recites elements that essentially track the pertinent elements of claim 28 discussed above. Therefore, claim 51 is patentable over Steinberg in view of Chen for at least the same reasons explained above in connection with claim 28.

As explained above, claim 40 has been rewritten in independent form and has been amended to incorporate the elements of allowed claims 41-43. Therefore, claim 40 now should be in condition for allowance for at least the same reasons as claims 41-43.


IV. Claim rejections under 35 U.S.C. § 103

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.

Charge any excess fees or apply any credits to Deposit Account No. 08-2025.

Respectfully submitted,

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Edouard Garcia
Reg. No. 38,461
Telephone No.: (650) 289-0904

Please direct all correspondence to:

Hewlett-Packard Company
Intellectual Property Administration
Legal Department, M/S 35
P.O. Box 272400
Fort Collins, CO 80528-9599